Blended Learning Approach For EFL In-Service Teachers In Constructing Smart Learning Environment: Innovation In Education Personalized For Self-Independent Learning

Nasrullah[1*], Elsa Rosalina[2], Muhammad Haris Naufal[3], Alya Shofa Faradila[4], Raisa Nur Tanziliana[5]

[1,2,3,4,5] Universitas Lambung Mangkurat, Indonesia
* Corresponding Author:
Email: nasrullah01@ulm.ac.id

Abstract.
It has been two years since Indonesia and other countries globally went through an abrupt change due to the pandemic covid 19 in educational delivery experiencing online learning to blended learning. To respond to the shift, practitioners and researchers conducted several studies on the implementation and effectiveness of blended learning in many subject areas, especially in the EFL context. However, it is still obscure find out the study which leads to the direct effect of how blended learning can create a smart learning environment as well as spur self-independent learning. To fill this void, therefore, this study aims at investigating how EFL teachers harness blended learning to create a smart learning environment and self-independent learning for students. To get the data, researchers employed a mix-method approach by using a survey with 18 items and ten items for an open structured questionnaire, then analyzed the data by using descriptive and thematic analysis. The findings of this study reported that EFL Teachers perceived well that in blended learning, not only does the technology used as the instrument deliver materials but it also can be used to accelerate English proficiency by providing a rich-exposure milieu, cosy interactions and meaningful tasks while learning. In addition, this study implies that EFL teachers should always be inclusive toward the rapid changing of technology and willing to adjust regardless of the learners' diversity and ensure the learning autonomy for learners.

Keywords: Autonomous learning, Blended Learning, Smart Learning Environment and Technology Integration

I. INTRODUCTION

Pandemic time and post-pandemic time make many educational practitioners and researchers pay attention to the study of online learning and offline learning in the meantime [1]. In Indonesia, in particular, the ministry of education emphasizes using online applications while carrying on face-to-face learning. A number of studies have been conducted, and a number of evaluations is also done to ensure the system of delivery can be run in the instructional process ([2]–[4]). Google Classroom, flip learning, moodle, and MOOC are some of the learning management systems which have been used in classroom activities up to now ([5]–[7]).The learning environment has very much to do with conditions constructed for teaching and learning in specific areas, such as school and classroom space [8]. It is elucidated by [9]that the learning environment can be taken place in a vacuum space; there must be any interaction among the interrelated components, which consist of physical components and human components. This way, it can be specified that elements involve teachers, students, content learning process, and learning situation ([10], [11]). Nowadays, as with the development of milieu to nurture the learning process, an updated and well-adjusted environment is so much required especially when it is based on the learners' background today as generations which constantly evolve dynamically. Following the changes, a smart learning environment (SLE) comes with the notion understood by the previous common definition where the technological tools take their part to cultivate and produce knowledge [12]. [12] uncovers the concept of a smart learning environment, for its essence is not merely associated with tools because when it is defined as it does and leaves the other components in a static way, the transformation of a smart learning environment can not happen.

He further argued in one of the categories of SLE that proposed all elements, such as people, tools, systems, and structure, should enable the learning itself, not prevent it; that is why hegemonizing them can make itself a smart environment [13]. Globally, it is common to see that face-to-face learning dominates the delivery in the classroom environment. Not only that, the involvement of technology as the media is one of the marking landscapes that fill the classroom interactions while transferring knowledge. It can also be said that technology integration is more frequent can be said one which can build a smart learning environment. As with the more advanced environment of learning, blended learning comes with offering learning not only conducted through face to face but also through online learning ([14][15][2]).[16] argued that despite those

massive of technological adoptions in the instructional landscape, there are still many challenges faced both by teachers and also students in absorbing the knowledge, starting from the instability of internet connection, lack of skills of the teachers in operating the technology applications, the claim from students who feel not comfortable staring the computer in the long run, the feeling of learning lost. In addition, many teachers have a misperception about blended learning, which deems that if the technology exists in the classroom meaning that blended learning has been carried well without considering the effectiveness of pursuing the learning aims.Blended learning actually has been getting the attention by several researchers since 2010s ([17]–[20]). However, the series of seminal studies in the Indonesia context has just reported that blended learning is a matter of how teachers can use technology in the classroom setting, not discuss a lot of the value of mandatory principles that should be present in the interplay due to the fact that the opportunities to well integrate technology and content in the classroom are not massively distributed, the enactment of blended learning is not fully doable; it can be caused by the less use of new applications which are assumed not quite needed yet in the setting of face-to-face activity.

Not until the pandemic comes, many technology trainers, EFL and non-EFL educators feel the serious need for knowledge of technology to make them easier to teach during online learning ([21][22]).It is expected that through blended learning, learners can get comprehensive experiences which can take them to content knowledge mastery as well as get the desired skills quickly and meaningfully. In this regard, students can feel meaningful if the learning is more personalized and contextualized, where the knowledge is sought through discovery in a lens of constructivism. In other words, as they count on their self-reflection and self-discovery to find the knowledge and sediment the skills, self-independent learning plays a central role in this process, and it is powerful to drive the learning [23]. Since blended learning automates a smart learning environment, [24] acknowledged that blended learning also could be a learning mode to promote autonomous learning so that having been exposed to the greater potential of delivery, it needs persistent effort to coin the learning of language to obtain proficiency in both ESL or EFL context as this endeavor is supported by [25], [26] and [25]. Previous studies have been conducted by several researchers. However, only a few studies in this area address that blended learning can be an impetus for creating a smart learning environment and making the learner have self-independent learning. Hence, to fill the void, this study aims at investigating whether blended learning can be a path to create a good learning environment and to gauge autonomous learners.

II.   METHODS

This research employed the mixed method approach [27], in which the quantitative data was obtained through a Likert scale survey and qualitative data was gained through an open-ended questionnaire. The quantitative data were analyzed by using descriptive analysis, where the mean and percentages of respondents were reported, while the qualitative data were analyzed by using thematic analysis, where the data was sorted, codified, displayed and presented based on the themes categorized [28].

This study involved 35 EFL Inservice teachers in South Kalimantan who became members of MGMP in Junior High Schools in two different regencies, MGMP SMP Tabalong and MGMP Barito Kuala. Before collecting the data, they were given informed consent to be the participants of this study.To collect quantitative data, researchers used a Likert Scale consisting of 18 statements with four choices that participants should choose; strongly disagree, disagree, agree, and strongly agree. While collecting the qualitative data, the researcher used ten open-ended questionnaires to validate the choices that they made and generate findings that emphasized highlighting theory for the practice of blended learning.

III.   RESULT AND DISCUSSION
Blended Learning as the Medium and Principle of Approach to Instruction

Blended learning is not only meant as the involvement of technology in classroom activities but it is also seen in the design of the interactional plan and decisions made by teachers. In this regard, the EFL teachers manifest the principle in specific ways in which the technical use of the approach is visibly curated.
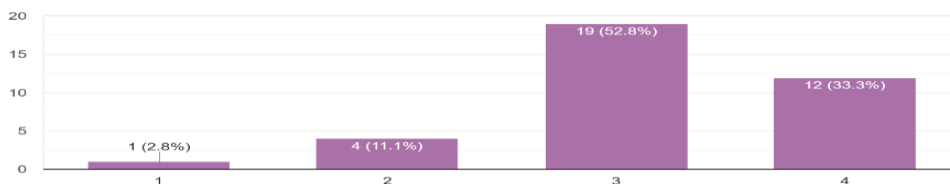
Fig 1. In designing blended learning, the teachers lead the students to understand learning
materials and validate the proper thought the students possess

In the chart, it can be seen around 52.8% of EFL teachers representing the highest choice in the chart agreed that what they must do in the context of Blended learning is to guide the students' understanding and show what students have obtained is based on a reliable concept in the materials distributed. 33.3% of the teachers approved of the importance of the role to carry on. Only 11.1% said disagree, and 2.8% who uttered strongly disagree.
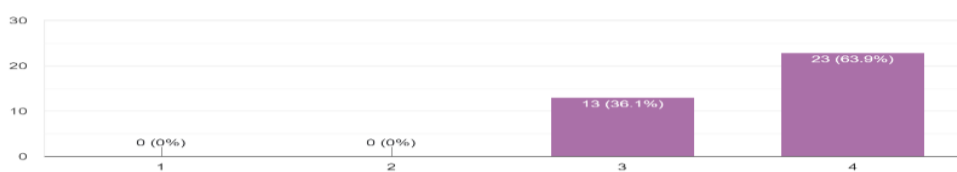

Fig 2. In putting blended instruction into practice, teachers provide
meaningful learning in the classroom

This chart reported that the majority of EFL teachers, 63.9%, strongly agreed that the class should be managed meaningfully. In addition, 36.1% approved of the condition to make the course more meaningful, while none denied this concept.
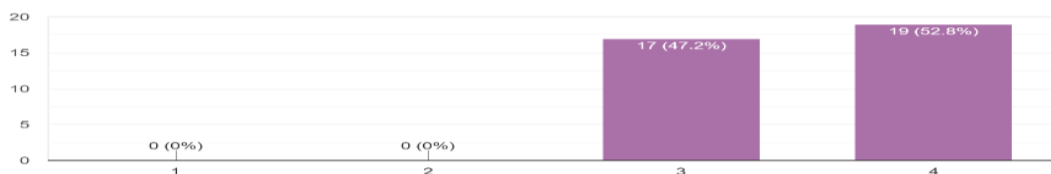

Fig 3. In blended learning, engaging and exciting lessons should be available

This chart reported that 52.8% of EFL teachers strongly agreed and 47.2% that teachers should provide engaging and interesting learning for their students either online or face-to-face mode of delivery. On the other hand, none of them stated either disagreed or strongly disagreed.
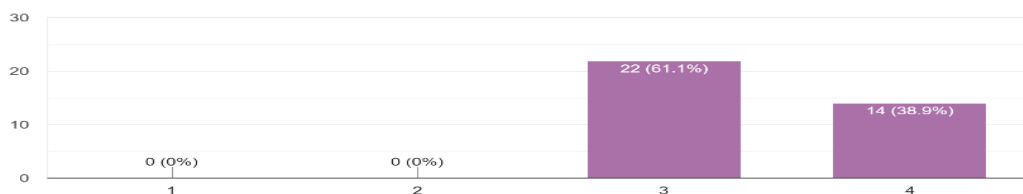

Fig 4. In blended instruction, it is good to give rapid or immediate feedback to students in
the learning phase, both in the classroom and outside the classroom.

In this chart, most teachers decided to agree with 61.1% upon the notion that teachers give rapid responses during or after instruction, while 38.9% strongly support the idea. In order words, the EFL teachers put more emphasis on providing feedback to that the learning progress can be taken place and monitored at the moment. Moreover, in this case, none of them disapproved of giving their students immediate feedback.
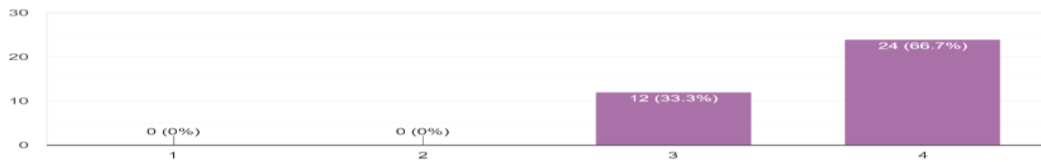
Fig 5. In blended instruction, teachers give the freedom for students to deliver
opinions while the learning process

This chart illustrated that most teachers (66.7%) strongly agreed that students should be given ample opportunities to provide an opinion in class in a discussion activity for student-to-student interaction or in student-teacher interaction. In the meantime, the number of teachers 33.3% voted to agree with the concept of giving freedom of speech or have a voice to show the sediment of knowledge they already have. Furthermore, none of the teachers showed the negative spectrum with this statement.
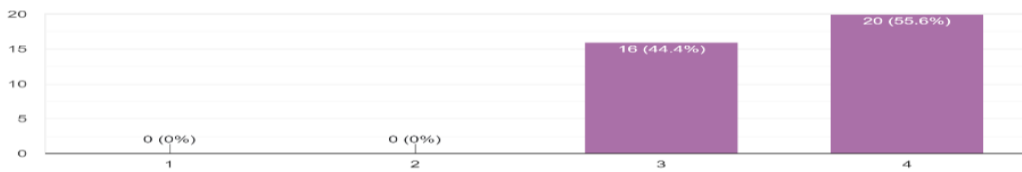

Fig 6. Self-independent learning has been provided to enable students learn anywhere they want
and explore materials provided structurally by teachers

Regarding the concept of independent learning, most teachers (55.6%) strongly agreed that they make students to have freer learning nuance to explore both structured and unstructured material given. In addition, the other group of teachers (44.4%) also agreed that they ensure the learning choices for students to access information whenever resources are available and not solely on those being provided in the classroom setting. It was interesting to see that none of the teachers disagreed with this concept.
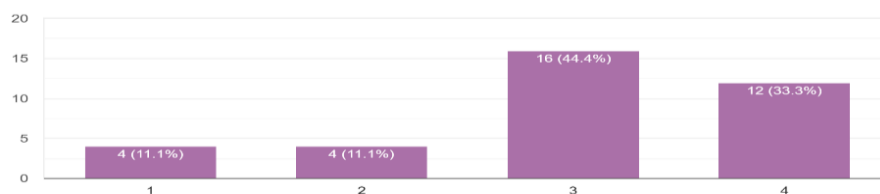

Fig 7. Self-independent learning that teachers have created encourages collaborative
learning rather than individuals

This chart showcased that 44.4% of teachers agreed that self-independent learning emphasizes a collaborative way of learning rather than an individual way of learning. At the same time, 33.3% of teachers strongly agreed that collaborative learning is the face of self-independent learning. However, as much as 11.1% for those who strongly disagreed and the same number also for 11.1 in the other groups of teachers shared the same opinion.
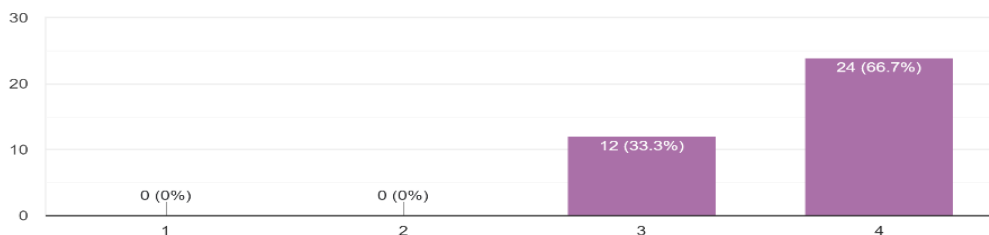

Fig 8. Self-independent learning initiated by teachers is central to students

This chart showed that most teachers (66.7%) strongly agreed that the centre for learning in the classroom focuses on students. In addition, 33.3% of teachers agreed that students are the heart of classroom activities. It is noticeable that none of them refused to acknowledge that students are the reason for designing the teaching and learning process.
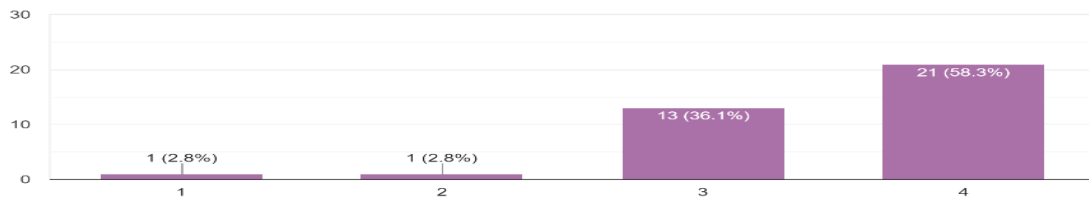

Fig 9. Self-independent learning initiated by teachers placed the balancing role for teachers as facilitators and students as the centre for doing the activity

This chart revealed that most teachers (58.3%) strongly agreed that in self-independent learning that the role of a teacher as manager and students as the learning centre should be balanced. In a similar voice, 36.1% of the teachers agreed with the notion. However, 2.8 % of a group of teachers strongly disagreed, and the same percentage of teachers also disagreed with the notion.
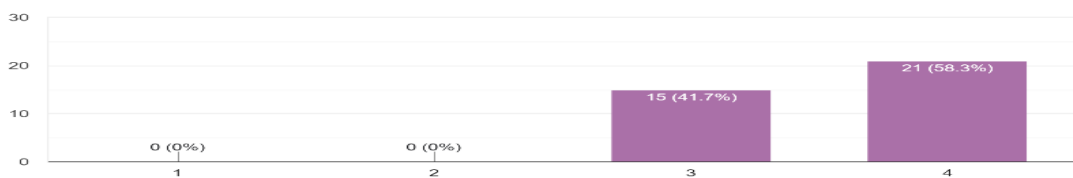

Fig 10. Self-independent learning assigned by teachers makes students more motivated as students can decide on learning patterns suited to their learning style

This chart reported that 58, 3% of the teachers strongly agreed that with self-independent learning, the learning would be more motivating because they could decide the study pattern in which they can adjust learning way which suitable for material absorption. In the meantime, 41.7% of the teachers agreed with the notion raised. However, none of the teachers disapproved of the concept.
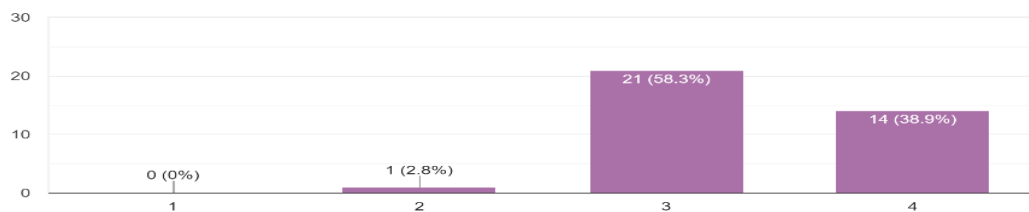

Fig 11. Teachers provide reflection space and improvement in self-independent learning

This chart informed that 58.3% agreed that teachers should be able to provide a reflective space for students and should also provide a self-learning process. In the meantime, 38.9% strongly agreed with the notion. However, 2.8% disagreed with the thought, and none of the teachers chose strongly disagreed with this issue.
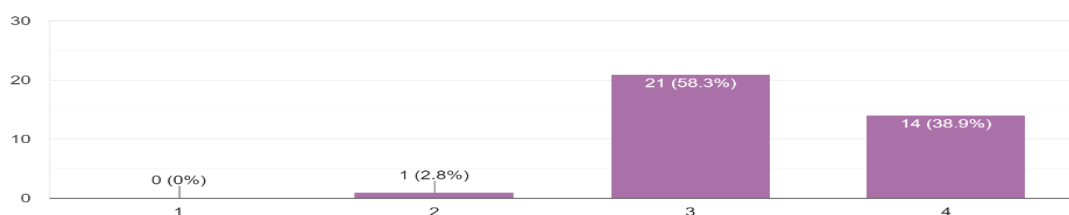

Fig 12. Self-independent learning that teachers had created consist of phases such as planning, self-monitoring, guideline and work pace, and evaluation

In this process, 58.3% of the EFL teachers agreed, and 38.9% strongly agreed that in the concept of self-independent learning that the program, students were expected to experience a phased process, self-monitoring and immediate control over work to carry out an evaluation to be done. While only 2.8% disagreed with the process, and none of them strongly disagreed with the concept.

Instilling the Notions of Smart Learning Environment to Instructional Design
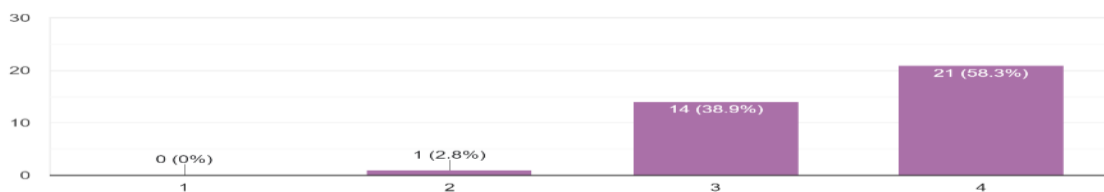

Fig 13. A smart learning environment allows students to synthesize knowledge which has been taken from any resources by themselves

This chart reported that 58.3% of EFL teachers strongly agreed and 38.9% agreed that the blended learning delivery mode which allows students to open access to information and enables them to modify the knowledge suited to the learning goal can establish a smart learning environment. On the other hand, only 2.8 % disagreed, and none of them strongly disagreed with the notion.
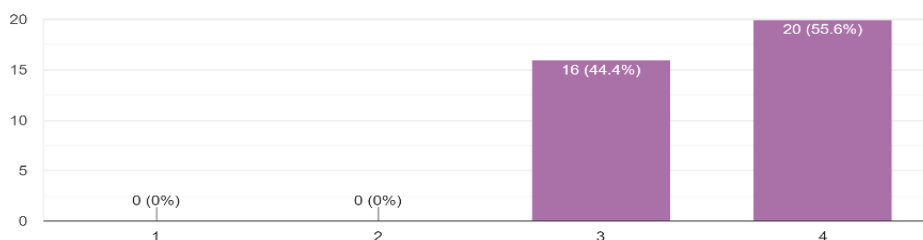
Fig 14. Maintaining and utilizing the students' characteristics to support the related content knowledge to construct a smart learning environment

This chart illustrated that almost the majority of EFL teachers (55.6%) strongly disagreed, and 44.4% of the teachers agreed with the thought of keeping and using the students' characteristics can support to create a smart learning environment. In addition, none of them disagreed and strongly disagreed with it.

Fig 15. Smart Learning Environment make teachers acknowledge the current situation in which students are in need of help

This chart reported that 55.6% of EFL teachers strongly agreed and 44.4% of them agreed that the situation where they know when the students need help to learn can make a smart learning environment. While none of them posed strongly disagreed and agreed.

Fig 16. Smart learning environment make teachers give meaningful feedback immediately based on types of assignment and students' characteristics

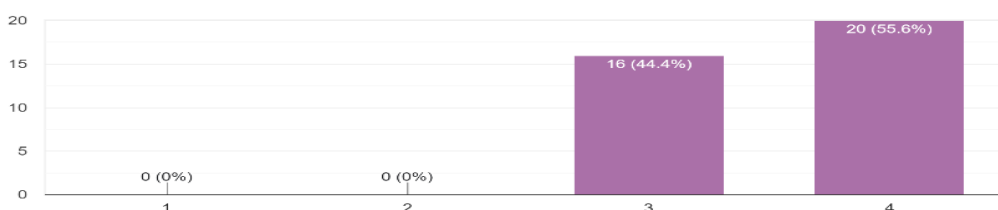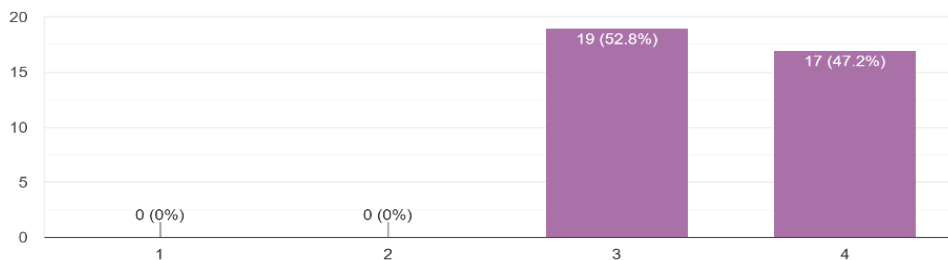This chart reported that 52.8% of EFL teachers agreed and 47.2% strongly agreed that it is central for them to give students meaningful and punctual feedback, leading to the establishment of a Smart Learning Environment. In the meantime, none refused to that notion while giving instruction to students. Having been exposed to the finding, it can be summarized that to better create a smart learning environment, teachers believed that meaningful and immediate feedback given would be an essential component that must exist in that milieu.
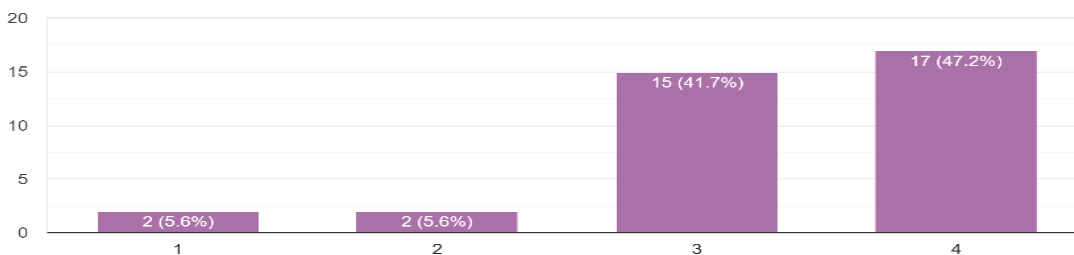
Fig 17. Smart Learning Environment is not always related to technology

This chart visualized that even though there is a small number of EFL teachers (5.6% for those who agreed and strongly agreed) that a Smart Learning Environment must be related to the provision of technology, on the other hand, 47.2% of EFL teachers strongly agreed and 41.7% stated they agreed that Smart learning environment did not always attach to technology using.
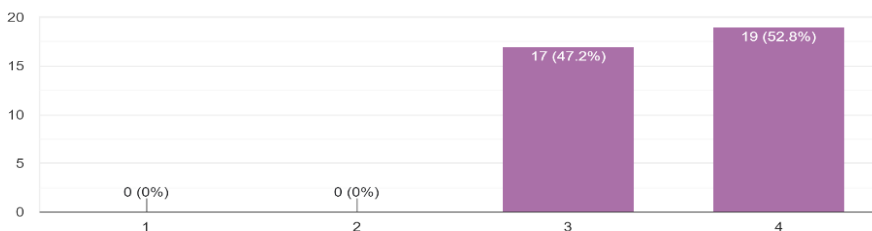
Fig 18. Smart Learning Environment creates a learning atmosphere which sustains the balanced relationship between Teachers and Students

This chart described that 52.8% of EFL teachers strongly agreed that Smart Learning Environment can occur if there is any balance in the activities designed by teachers. Not only do the activities cantered from teachers, but it does also accommodate activities which involve students' interaction to ensure the comprehensibility of the material delivered. In this respect, 47,2% of EFL teachers also agreed with the aforementioned notion, while none of them had a negative perspective on that concept.

Interview Finding

This interview part is meant to validate finding in the licker scale and to intensify the quality of the concept in the context of learning environment, smart learning environment, blended learning and self-independent learning. *Regarding the learning environment*, the majority of EFL teachers extended that it refers to a place and condition that supports the teaching and learning process, even though some said that it has something to do with the learning ecosystem located outside the school. They also said that the learning environment is something that can affect learners' attitudes and learners' learning development involved in the learning process. It is worth noting also that they perceived that it is a learning environment that can facilitate the learners to learn well. At the same time, it is added that the learning environment is not only related to the physical appearance where the learners can learn, but it is also more to the feeling that is created to support fun, conducive, and flexible to constitute reciprocal communication. From the voices that have been uttered above, it can be summarized that the learning environment is meant to facilitate and support the learners so that the learning can be taken place as it has been expected and designed in the instructional process. *With regards to whether the teachers commit to providing that learning environment*, they put forward that a conducive, fun and well managed can promote and motivate the learners so that it has a direct impact on providing a learning state. In this set up, they acknowledge that they have provided such facilities as books, media, etc.Furthermore, they need to yield a conducive milieu of learning because it can influence the growth mindset of learners at school.

It can be constituted if class management has been well arranged in addition to ensuring cosy nuances in the psychological perspective. It also can be the impetus for mental readiness for students to learn. In short, an environment which can be supportive can pave students to be more comprehensible to the aim of learning. The supports that EFL teachers give to their students comprise a clean and tidy classroom, supportive learning facilities, resources for learning such as books and worksheets, computer or laptop used, projectors, smartphone, google classroom, and learning media. At the same time, a more intangible form of environment includes classroom management rules, warm communication, and the principles of responsible freedom to post opinions and argumentation while learning.*Regarding the view of EFL teachers see that learners can get a learning environment outside the classroom can be entailed as most of them argue that it is very prominent*. The reason why they support it is the students can develop interest and talent based on the learning characteristic and learning styles add horizon and other related knowledge toward the language they learn. Besides, they believe students can learn best if they can acknowledge suitable ways of learning. As a consequence, they permit the students to access information or resources of knowledge to promote the subject-related knowledge understanding they currently learn. The learning environment can be in the form of an outdoor study led by EFL Teachers where the learning activities occurred, adapted and synchronized by setup learning objectives.

The other form could be peer groups among students. In this way, students can explore within their similar levels to get knowledge. The other way could be the references of learning resources distributed to learners. Lastly, the other means of learning could be a community of knowledge and a community of practice handled by professionals or a learning club that students can attend.*In connection with the knowledge of a smart learning environment (SLE),* EFL teachers understand a variety of notions. There is one who sees it as the environment which can promote the learning technology fusing the smart learning system and its function. There is one who also sees it as the environment which can support the students optimally and can level up students' intelligence. The other teachers see SLE as an environment which can increase learning and teaching quality. To sum up, even though there are few teachers who define it as a situation and environment which sustain effective and interesting learning for students, many of them mention that SLE is an environment which can make use of technology while the learning process is taking place. *Regarding blended learning, EFL teachers looked at the mode delivery in a pretty similar way*. They said that Blended learning is a method of learning which combine face-to-face learning and distance learning, while others mention the fusion of face-to-face and online learning. There also regard that method will join the synchronous and asynchronous learning.

While there is one teacher who sees blended learning as a system that enables students to access the content guided by teachers to be conveyed with a specific time, and sequence, although physically, students meet, there are still any media integrated in the instructional design. *With regard to making blended SLE learning, EFL teachers are optimistic that they can create the situation.* One of the ways is by utilizing an available learning management system (LSM). In this way, having been designing various learning activities in LMS, for example, google classroom and putting multiple resources to learn, students can access it not only in the classroom setting, but it can be accessed outside the classroom anytime and anywhere. With the help of technology as the assisted learning tool for students, smart learning can be created where students can gradually learn the material from their devices or through instructions from LMS so that they can start to take learning quests to fulfil the aims of learning whenever they are ready to that. The other way could via vivid instruction made by teachers through digital literacy access such as the use of 1,0 or 2.0 websites. Since today there are a lot of applications and interactive website resources, meaningful learning, which is related to students' lives contextually, can be learned anytime, and it can be used by EFL teachers to supply comprehensive material for their students.

Most importantly, from this activity, teachers stressed that if the teacher at first hand can teach students how to learn best learn independently, students can keep the pace of learning as it is expected. So it is essential for teachers to teach students digital literacy in learning language because it can sustain the ability to learn autonomously by the condition the teachers should have sufficient knowledge of the concept.*In the case of whether blended learning can create an environment that can take learners to be more autonomous*, EFL teachers put forth that they agree in a way when teachers employ innovative learning which harnesses educational information and communication technology. Moreover, EFL teachers should equip them with various abilities to incorporate technology in teaching language content to ensure effective teaching.In addition, autonomous learners can be created in a blended learning environment if students can solve the task by using any kind of information spread in digital resources such as blogs, websites, e-books or YouTube. In this way, students have considerable opportunities to select and synthesize information that meets the requirement of learning objectives by their discovery in a constructivist way. This can be successfully managed if there is clear guidance in every material and task in both blended learning modes.

The Interweaving Roles in The Use of Blended Learning in Creating Smart Learning Environment and Self-Independent Learning

This part will discuss the interplay of whether the blended learning that had been applied by EFL teachers can be an impetus and an initial effort to create the learners' autonomy and smart environment. To further investigate this research question, there are several themes arising from findings; a learning environment which supports learning, the comprehensibility of digital literacy in blended learning and designing teaching principles in blended learning to ensure self-independent learning.

Smart Learning Environment which Supports Learning

It is interesting to discuss how an educator sees the learning process. It is common in classroom pedagogy that teachers should ensure that in designing instruction, there are vivid learning aims, clear pedagogical methods or techniques conducted, materials which meet the goals and skills and also the evaluations that will be applied to measure the process [29]. To succeed in the process, a teacher should not think that he is the only one who can take students to have a good understanding in learning because if it so, the length of time for all students who have different learning styles, and characteristics of learning will be longer since teachers should treat them differently.To cope with variability in learners' understanding despite their differences, it is crucial for teachers to identify learning environment components [30] and which ones can maximize the attainment of students learning in getting the knowledge and skills [30]. In this study, EFL teachers argue that not only the physical environment makes students easier to obtain knowledge but something intangible that can be more applicable to ensure the students learn. To better accelerate the students' attainment to learn the subjects of learning mastery, it needs not only a common environment but it is a smarter one to accelerate the process.

In this regards, the concept of a smart learning environment takes its role in this digital era (Price, 2015; Dron, 2018; García-Tudela et al., 2021). Even though teachers some EFL teachers perceive that a smart learning environment has something to do with technology and digital devices or application used in the classroom, others argue that it is the appropriate principles and treatment while teaching that can affect most to the outcome of learning. In this matter, if the learning process happens in a smart learning environment where comprehensive inputs are available, the acceleration of learning attainment can be initiated well. In learning a language, the role of technology is essential; however, when the dependency on technology in the class is viewed can replace the critical components in the learning environment, the misconception will not play a crucial role in obtaining effective learning to learn a language in this case. It is better to see the exact point where the part of technology can matter most based on the language learning principles. For example, because of technology, students have wider opportunities to get involved in an iterative learning process in which the possibility of deeper understanding can be assured, and the skills can be sharpened and obtained well.

The Comprehensibility of Digital Literacy in the Blended Learning

Conducting blended learning needs to know at first-hand, elements which fuse with it. The interplay between face-to-face and online learning at first glance will come with great potential to gain learning outcomes rather than the common practice of delivery (Azmi, 2017; Isti'anah, 2017). Hence, unravelling the positive side of each mode of delivery to disseminate knowledge to students will come with a closer approach to learning attainment. The need to look at this approach is carried on to ensure a mirage that claims no evidence for a better learning experience[29]. Learners need various experiences which can take them to more personalized learning ways to grab the knowledge and embody it with expected novel skills. The question is when it comes to the other side of blended learning delivery, online learning, which one package with face-to-face learning, teachers very frequently take into consideration how they can operate the technical knowledge skill while delivering knowledge in teaching (Sabado, 2018; Jerry and Yunus, 2021). This part usually becomes a struggle, especially for senior in-service teachers, even though not all experience this hurdle. However, these phenomena spark the fact that in running the online session in this blended learning, teachers are in need of learning to have the technology to deliver content well.

In this study, EFL teachers extended that to operate the online session in blended learning, they need technology in the form of media used, rich sources of material packed in the digital internet of things until the interactive assessment that can be used while learning. In other words, if they do not have sufficient digital literacy, they will have a greater challenge in running and synchronizing both modes of delivery [35]. However, this study also reveals that the most common practice of blended learning is grounded by merely using technology in the learning process, whether through synchronous or asynchronous mode. In the inception of the blended learning approach, meaningful learning underpins the use of technology interplay. To better obtain learning output experienced by learners. However, this study spurs the understanding of awareness for practitioners and educators, especially English teachers, to present the vital aspect that should be existed in blended learning; cognitive presence, teaching presence, and social presence [36].Having been discussed the basics principles in blended learning, it is important for language teachers to provide the three aspects in designing instruction in the EFL context [37]. It can be elaborated on how language proficiency can be obtained effectively in the context of blended learning. Hence, to increase learners' cognitive shift, it is the teachers' duty to design whatever teaching techniques in face-to-face and online pedagogy work best.

Designing Teaching Principles in Blended Learning for Ensuring Self-Independent Learning.

Teaching language in a new situation of delivery needs a significant effort in so doing. If beliefs and paradigms of teaching are appropriate, the learning objectives can be more attainable and doable[38]. Learning that relies on teachers as the only source of knowledge will inevitably come with disappointment. In the current era, technology can access knowledge everywhere and anytime. If teachers do not design instruction that adapts to new learning situations, the effectiveness of material delivery will not meet the expectation.With the increased awareness, the teaching design will no longer be teacher-centred but more student-centred [39]. For that reason, the principles of blended learning that accommodate social interaction open the teachers' mind to provide open interactions, be it cooperative or collaborative learning [40].

Additionally, the interactions also come with the awareness of content mastery. This way will make teachers integrate resources from various resources such as books, websites, blogs, and applications to learn language based on the class syllabus. To better implement it, teachers need to design better how they can facilitate the learners to learn, guide them and give appropriate feedback while learning [41].

With this awareness of principles in mind, the activities selected and designed inside and outside the classroom by the teachers can accommodate the principles. The EFL teachers, as they realize this concept, can trigger them to provide instruction in the warmer part, while activities and also post activities with experience of making students to interact, practice, and do repetition for learning. By doing so, EFL learners will gain greater access to level up their language proficiency under the teachers' guidance using technology devices and effectivity of learning. As digital literacy becomes routine in the classroom, not only do the teachers get benefits, but students also can make use of it for their learning target [42]. As the teachers use learning management systems such as google classroom, Edmodo or Schoology with clear instructions and tasks, which consist of learning development stages in the platform, it enables students to learn independently. For example, when the students are instructed by teachers to make a video to perform the language, they automatically find out the best ways to learn with and by technology independently. By any means, students, in this way, learn a language and any other subjects by trying, discovering and constructing knowledge to complete the assignment and showcase the knowledge they have understood by themselves through performance.

IV.   CONCLUSION

This study reveals that understanding the learning environment will make teachers and students more effective in getting the knowledge and skills expected, especially in learning English in the EFL context. A smart learning environment can trigger teachers to be more sensible in using technology. Hence the students who receive knowledge from teachers who are more aware of the smart learning environment can be more lively nowadays since every living being today is already using technology. This study unravels that even though the common understanding of blended learning is more to involve technology in the classroom, it is still a mere involvement. So, this study gives a clear message that if blended learning comes with teaching presence, cognitive presence and social presence, the fusion of technology can be more advantageous. The learner-centred, which becomes the trademark for today's learning, can be more derived in adopting a social presence that should be available in blended learning. In this regard, when the activities have been set up for students' priority, the space for learners to discover knowledge by themselves is much wider because the opportunities for students to practice the content (language, in this case) are ample.

Even though this study gives a horizon in how to operate blended learning based on its principles, this research needs to involve more participants in terms of perspective and attitude toward the implementation of blended learning in other communities of practices so the findings can be more implemented and applied directly in policy level. This study has theoretical and practical implications in implementing blended learning in Indonesia. Theoretical implications of this research suggest strongly involving cognitive presence, teaching presence and social presence in designing blended instruction. While the practical implication of this study leads the practitioners, especially EFL in-service teachers, to be inclusive toward the rapid changing of technology, increase digital literacy and be willing to adjust to always learn regardless of the learners' diversity and ensure the learning autonomy for learners.

V.   ACKNOWLEDGMENTS

REFERENCES

[1]   A. Isti'anah, "THE EFFECT OF BLENDED LEARNING TO THE STUDENTS ' ACHIEVEMENT Blended learning has been popular in language learning and," *Indones. J. English Educ.*, vol. 4, no. 1, pp. 16–30, 2017, doi: 10.15408/ijee.v4i1.5697.IJEE.

[2]   J. Bowyer, "Strategic use of classroom time Evaluating blended learning: Bringing the elements together," *Res. Matters*, no. 23, pp. 17–26, 2017, [Online]. Available: http://www.cambridgeassessment.org.uk/research-matters/.

[3]   J. A. R. Villanueva, P. Redmond, and L. Galligan, "Manifestations of Cognitive Presence in Blended Learning Classes of the Philippine K–12 System," *Online Learn. J.*, vol. 26, no. 1, pp. 19–37, 2022, doi: 10.24059/olj.v26i1.3021.

[4]   S. D. Antoro, H. D. Surjono, and B. Sugeng, "Designing Initiation Materials for Promoting Autonomous Learning in Blended Learning EFL Classroom," *J. Phys. Conf. Ser.*, vol. 1254, no. 1, 2019, doi: 10.1088/1742-6596/1254/1/012047.

[5]   L. Abeysekera and P. Dawson, "Motivation and cognitive load in the flipped classroom: definition, rationale and a call for research," *High. Educ. Res. Dev.*, 2015, doi: 10.1080/07294360.2014.934336.

[6]   S. Bayne, "Teacherbot: interventions in automated teaching," *Teach. High. Educ.*, vol. 20, no. 4, pp. 455–467, 2015, doi: 10.1080/13562517.2015.1020783.

[7]   R. C. Chick *et al.*, "Using Technology to Maintain the Education of Residents During the COVID-19 Pandemic," *J. Surg. Educ.*, vol. 77, no. 4, pp. 729–732, 2020, doi: 10.1016/j.jsurg.2020.03.018.

[8]   U. Stadler-Altmann, "Learning environment: The influence of school and classroom space on education," *Routledge Int. Handb. Soc. Psychol. Classr.*, no. January 2015, pp. 252–262, 2015, doi: 10.4324/9781315716923.

[9]   R. Malik and A. Rizvi, "Effect of classroom learning environment on students' academic achievement in mathematics at secondary level," *Bull. Educ. Res.*, vol. 40, no. 2, pp. 207–218, 2018, [Online]. Available: https://files.eric.ed.gov/fulltext/EJ1209817.pdf.

[10]   J. Volpe White and K. Guthrie, "Creating a Meaningful Learning Environment: Reflection in Leadership Education," *J. Leadersh. Educ.*, vol. 15, no. 1, pp. 60–75, 2016, doi: 10.12806/v15/i1/r5.

[11]   L. Closs, M. Mahat, and W. Imms, "Learning environments' influence on students' learning experience in an Australian Faculty of Business and Economics," *Learn. Environ. Res.*, vol. 25, no. 1, pp. 271–285, 2022, doi: 10.1007/s10984-021-09361-2.

[12]   J. Dron, "Smart learning environments, and not so smart learning environments: a systems view," *Smart Learn. Environ.*, vol. 5, no. 1, 2018, doi: 10.1186/s40561-018-0075-9.

[13]   P. A. García-Tudela, P. Prendes-Espinosa, and I. M. Solano-Fernández, "Smart learning environments: a basic research towards the definition of a practical model," *Smart Learn. Environ.*, vol. 8, no. 1, 2021, doi: 10.1186/s40561-021-00155-w.

[14]   D. R. Garrison and N. D. Vaughan, *Blended Learning in Higher Education: Framework, Principles, and Guidelines*, First Edit. United States of America: Jossey-Bass A Wiley Imprint, 2008.

[15]   N. Moore and M. Gilmartin, "Teaching for Better Learning : A Blended Learning Pilot Project with First-Year Geography Undergraduates," vol. 34, no. 3, pp. 327–344, 2010, doi: 10.1080/03098265.2010.501552.

[16]   E. Rosalina, N. Nasrullah, and E. P. Elyani, "Teacher's Challenges towards Online Learning in Pandemic Era," *LET Linguist. Lit. Lang. Teach. J.*, vol. 10, no. 2, pp. 71–88, 2020, [Online]. Available: http://jurnal.uin-antasari.ac.id/index.php.

[17]   Z. Akyol and D. R. Garrison, "Understanding cognitive presence in an online and blended community of inquiry: Assessing outcomes and processes for deep approaches to learning," *Br. J. Educ. Technol.*, vol. 42, no. 2, pp. 233–250, 2011, doi: 10.1111/j.1467-8535.2009.01029.x.

[18]   W. Zhang and C. Han, "A case study of the application of a blended learning approach to web-based college English teaching platform in a medical university in eastern China," *Theory Pract. Lang. Stud.*, vol. 2, no. 9, pp. 1961–1970, 2012, doi: 10.4304/tpls.2.9.1961-1970.

[19]   N. S. Snodin, "The effects of blended learning with a CMS on the development of autonomous learning: A case study of different degrees of autonomy achieved by individual learners," *Comput. Educ.*, vol. 61, no. 1, pp. 209–216, 2013, doi: 10.1016/j.compedu.2012.10.004.

[20]   G. G. Fogal, F. H. Graham, and A. G. Lavigne, "Blended Learning: An Evolving Praxis," *TESOL J.*, vol. 5, no. 2, pp. 353–373, 2014, doi: 10.1002/tesj.139.

[21]   A. Y. Ni *et al.*, "COVID-19 &Elearning: Perceptions &Attitudes Of Teachers Towards E-Learning Acceptancein The Developing Countries," *Comput. Educ.*, vol. 6, no. 2, pp. 27–42, 2020, doi: 10.1590/S1678-4634201710173240.

[22]   H. Sundari, F. M. Amin, and N. S. Anita, "Exploring EFL Writing Teacher Confidence as A Response to Emergency Remote Teaching : A Preliminary Survey using TPACK Framework," *LANGKAWI*, vol. 7, no. 2, pp. 145–156, 2021.

[23]   A. Hajimaghsoodi and M. Saghaieh Bolghari, "From Collective Activity to Autonomous Learning: Fostering Learner Autonomy in Light of Activity Theory," ***Int. J. Res. English Educ.***, vol. 4, no. 4, pp. 40–54, 2019, doi: 10.29252/ijree.4.4.40.

[24]   B. Lander and T. Kuramoto, "Development of the Autonomous Learner Through Blended Learning," ***J. Stud. Educ. Pract.***, vol. 29, pp. 165–176, 2013, [Online]. Available: http://portal.dl.saga-u.ac.jp/handle/123456789/120861.

[25]   B. M. Wright, "Blended learnings student perception of face-to-face and online EFL lessons," ***Indones. J. Appl. Linguist.***, vol. 7, no. 1, pp. 64–71, 2017, doi: 10.17509/ijal.v7i1.6859.

[26]   Y. F. Yang and N. C. Kuo, "Blended learning to foster EFL college students' global literacy," *Comput. Assist. Lang. Learn.*, vol. 0, no. 0, pp. 1–22, 2021, doi: 10.1080/09588221.2021.1900874.

[27]   J. W. Creswell, *Research design: Qualitative, quantitative, and mixed methods approaches*, vol. 3. 2009.

[28]   C. Robson and K. McCartan, *Real World Research*, 4th Editio. United Kingdom: John Wiley & Sons Ltd. United Kingdom, 2016.

[29]   N. Nasrullah, F. Mu'in, and E. Rosalina, "Teaching English in Secondary Schools," *Teach. English Second. Sch.*, vol. 6, no. 1, pp. 13–30, 2021, doi: 10.4135/9781473918443.

[30]   H. Nguyen and D. R. Terry, "English Learning Strategies among EFL Learners: A Narrative Approach," ***IAFOR J. Lang. Learn.***, vol. 3, no. 1, pp. 4–19, 2017, doi: 10.22492/ijll.3.1.01.

[31]   J. K. Price, "Transforming learning for the smart learning environment: lessons learned from the Intel education initiatives," *Smart Learn. Environ.*, vol. 2, no. 1, 2015, doi: 10.1186/s40561-015-0022-y.

[32]   N. Azmi, "The Benefits of Using ICT in the EFL Classroom: From Perceived Utility to Potential Challenges," *J. Educ. Soc. Res.*, vol. 7, no. 1, pp. 111–118, 2017, doi: 10.5901/jesr.2017.v7n1p111.

[33]   K. X. Sabado, "Exploring Teachers' Perspective of Technology Pedagogy: Implications for Practice," *ProQuest Diss. Theses*, p. 197, 2018, [Online]. Available: https://search.proquest.com/docview/2040502520?accountid=13155.

[34]   M. Jerry and M. M. Yunus, "Blended learning in rural primary ESL classroom: Do or don't," ***Int. J. Learn. Teach. Educ. Res.***, vol. 20, no. 2, pp. 152–173, 2021, doi: 10.26803/ijlter.20.2.9.

[35]   C. A. Young, N. Filson, and R. Debnam-O'dea, "Language today: Promoting ela content area learning through collaboratively engaged social media practice," *Lit. Res. Pract. Eval.*, vol. 9, pp. 169–193, 2018, doi: 10.1108/S2048-045820180000009010.

[36]   M. Mirabolghasemi, N. A.Iahad, and M. Qomaruddin, "Evaluating students' learning experiences using course management system in a blended learning," *Int. Conf. Electr. Eng. Comput. Sci. Informatics*, vol. 1, no. August, pp. 169–172, 2014, doi: 10.11591/eecsi.1.368.

[37]   M. Almasi and C. Zhu, "Investigating students' perceptions of cognitive presence in relation to learner performance in blended learning courses: A mixed-methods approach," *Electron. J. e-Learning*, vol. 18, no. 4, pp. 324–336, 2020, doi: 10.34190/EJEL.20.18.4.005.

[38]   M. Kek and H. Huijser, "Exploring the combined relationships of student and teacher factors on learning approaches and self-directed learning readiness at a Malaysian university," *Stud. High. Educ.*, vol. 36, no. 2, pp. 185–208, 2011, doi: 10.1080/03075070903519210.

[39]   M. M. Sheet, "Investigating the Effectiveness of Blended Learning Programs on Developing the Writing Skills of University Students: A Case Study دراسة حالة بحث فعالية برامج التعلم المتمازج في تنمية مهارات الكتابة لدى طلاب الجامعة," Beirut Arab University, Beirut, 2018.

[40]   F. Ferri, P. Grifoni, and T. Guzzo, "Online Learning and Emergency Remote Teaching: Opportunities and Challenges in Emergency Situations," *Societies*, vol. 10, no. 4, p. 86, 2020, doi: 10.3390/soc10040086.

[41]   A. Zangoei and A. Derakhshan, "The relationship between EFL teachers' preferences of corrective feedback and their attitudes towards communicative language teaching," ***Int. J. Appl. Linguist. English Lit.***, vol. 3, no. 5, pp. 82–90, 2014, doi: 10.7575/aiac.ijalel.v.3n.5p.82.

[42]   M. W. Sahidillah and P. Miftahurrisqi, "Whatsapp sebagai Media Literasi Digital Siswa," ***J. VARIDIKA***, vol. 1, no. 1, pp. 52–57, 2019, doi: 10.23917/varidika.v1i1.8904.